

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002211**Date Inspected:** 13-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2200**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wang Lu**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** See Below**Summary of Items Observed:**

On this date, Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) Inspector Edward Leach was present to randomly observe and document the welding and Quality Control (QC) functions performed by ZPMC personnel relative to the fabrication of SAS Superstructure project. While on site, the QA Inspector noted the following work.

New Tower Shop (Bay 2)

The QA Inspector made a random observation in this bay and observed ZPMC personnel performing welding and flame cutting bevel preparations for various tower skin plate assemblies. During this observation the QA Inspector observed ZPMC welding personnel Xue Yian, welder identification (ID) 040634 welding subsequent filler passes with the sub-merged arc welding (SAW) process in the flat position with JW-3 EM12K, 4.8mm diameter welding wire. The QA Inspector also noted two (2ea) additional personnel at the work station performing interpass cleaning and refilling the flux hopper. The QA Inspector reviewed the daily welding inspection report by ZPMC QC personnel Zhu Zhang Hai and noted the following welding parameters, 610 amperes, 32.2 volts and a travel speed 450 mm per minute. The QA Inspector was informed by the QC Inspector the welding was done to the requirements of welding procedure specification (WPS)-B-T-2221-B-U3-C-S. The QA Inspector also noted the material designation as ESD1-SA227A/H-16A. The welding in progress appeared to comply with the noted WPS above and the contract specifications.

Also in bay 2 of the new tower shop the QA Inspector observed the status of tower skin plate designation ESD1-SA216A/K-15B and noted side 1 of the double vee weld splice was approximately 25% welded at this time and ZPMC was preparing to flip the plate over to begin welding side 2.

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New OBG Shop

The QA Inspector made a random observation to this shop and did not observe welding taking place on this date. The QA Inspector observed the presence of five (5ea) ZPMC personnel in the process of performing flame cutting and bevel preparatory work for side panel designations SP-20A/SP12A, plate 77B/plate 72A. The work observed appeared to be meeting the requirements of the contract specifications.

Bay 1

The QA Inspector was informed by ZPMC Lead QC Inspector that ZPMC personnel will be performing ultrasonic testing (UT) on the closed rib splice welds for DP302-001, DP302-007, DP302-008 and DP302-009. At approximately 2045 hours the QA Inspector observed ZPMC UT personnel Li Li Ming and Dai Gen Sheng begin performing UT for these closed ribs. Two of the four closed ribs were not accessible at the time and had to be moved before UT could be performed. The work was still in progress at the end of the shift.

Summary of Conversations:

As noted above in report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Leach,Ed	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
